

IN THE CLAIMS

Please cancel claims 10 and 12-17, and amend the claims as follows:

1. (Currently Amended) A method for detecting asymmetry in transient signals, the method comprising the steps:

asymmetrically filtering ~~(1-8)~~ an input signal to detect pre-shoots and after-shoots of transient input signals; and

5            comparing ~~(9-11)~~ amounts of pre-shoots and after-shoots to furnish an output signal indicating whether pre-shoots or after-shoots pre-dominate.

2. (Currently Amended) ~~A~~ The method according to as claimed in claim 1, wherein the step of asymmetrically filtering ~~(1-8)~~ comprises the sub-steps:

filtering ~~(1)~~ the input signals utilizing a first set of  
5 filter coefficients resulting in an impulse response arranged to provide a first output representing only the pre-shoots present in the input transient signals; and

filtering ~~(2)~~ the input signals utilizing a second set of  
filter coefficients resulting in an impulse response arranged to  
10 provide a second output representing only the after-shoots present in the input transient signals.

3. (Currently Amended) ~~A~~ The method according to ~~as~~ claimed in claim 2, wherein said first set of filter coefficients are anti-symmetrical to said second set of filter coefficients.

4. (Currently Amended) ~~A~~ The method according to ~~as~~ claimed in claim 2, wherein the step of asymmetrically filtering further comprises the sub-step:

\_\_\_\_\_calculating ~~(3, 4)~~ absolute values of the first and second  
5 outputs to give first and second absolute values, respectively.

5. (Currently Amended) ~~A~~ The method according to ~~as~~ claimed in claim 4, wherein the step of asymmetrically filtering further comprises the sub-steps:

summing ~~(5)~~ the first absolute values over a pre-  
5 determined time interval to obtain first summed values; and

summing ~~(6)~~ the second absolute values over the pre-  
determined time interval to obtain second summed values.

6. (Currently Amended) ~~A~~ The method according to ~~as~~ claimed in claim 5, wherein said pre-determined time interval comprises an interval between field pulses of a video signal.

7. (Currently Amended) ~~A~~ The method according to ~~as~~ claimed in claim 1, wherein said method further comprises the step:

averaging the output signal of the comparing step ~~(9-11)~~  
~~is averaged (13)~~ over a plurality of field periods to reduce field-  
5 to-field variation effects.

8. (Currently Amended) ~~A~~ The method according to ~~as claimed in~~  
claim 1, wherein the output signal provides a value measure of the  
relative amounts of pre-shoots and after-shoots present.

9. (Currently Amended) An apparatus for detecting asymmetry in  
transient signals of an input signal, the apparatus comprising:

a pre-shoot filter ~~(1)~~ for receiving ~~an input signal~~ and  
asymmetrically filtering ~~it~~ an input signal utilizing a first set  
5 of filter coefficients to provide a first output in which  
substantially only pre-shoots of input transient signals are  
present;

an after-shoot filter ~~(2)~~ for receiving ~~the input signal~~  
and asymmetrically filtering ~~it~~ the input signal utilizing a second  
10 set of filter coefficients to provide a second output in which  
substantially only after-shoots of input transient signals are  
present; and

summing and comparison means ~~(3 to 11)~~ for summing the  
first outputs over a predetermined time interval, for summing the  
15 second outputs over the predetermined time interval, and for  
comparing first and second summed outputs to give an output signal

indicating whether pre-shoots or after-shoots predominate over the predetermined time interval.

10. (Cancelled).

11. (Currently Amended) A ~~peaking circuit according to claim 11, wherein said peaking filter (14, 15, 17) for performing peaking correction on the input signal comprises, said peaking filter comprising~~ an FIR filter comprising:

5 a delay line ~~(14)~~ for receiving the input signal and having a plurality of outputs ~~(140...144)~~;

a plurality of multipliers ~~(150...154)~~ each having a first input terminal connected to a respective ~~individual output one of the plurality of outputs (140...144)~~ of the delay line ~~(14)~~

10 representing a multiplicand, and each having a second input terminal for receiving a respective filter coefficient representing a multiplier, said filter coefficients being variable, and each having an output terminal for outputting a respective product; and

a summing circuit ~~(17)~~ for receiving and summing the  
15 respective products from the multipliers ~~(150...154)~~, ~~summing them~~ and providing a summed output,

wherein said peaking filter further comprises:

means for receiving a detection signal indicating whether  
pre-shoots or after-shoots are found to systematically predominate  
20 in transients of the input signal; and  
means for varying the filter coefficients of the FIR  
filter in accordance with the detection signal to provide a  
corrected output in which transients are substantially symmetrical,  
wherein said varying means varies said filter coefficients are  
25 ~~variable~~—such that, if neither pre-shoots nor after-shoots are  
found, by said detection signal receiving means, to predominate in  
transients of the input signal, ~~then said~~ filter coefficients are  
determined purely based upon a desired amount of peaking ~~required,~~  
and an impulse response of the filter will be symmetrical, whereas  
30 if said detection signal receiving means determines that pre-shoots  
are ~~found to predominate,~~ said varying means then varies said  
filter coefficients ~~are varied so as to provide an asymmetrical~~  
impulse response ~~in which resulting in~~ additional after-shoots are  
being produced, and if said detection signal receiving means  
35 determines that after-shoots are ~~found to predominate,~~ said varying  
means then varies said coefficients ~~are varied so as to provide an~~  
asymmetrical impulse response ~~in which resulting~~ additional pre-  
shoots ~~are being~~ produced.

12-17. (Cancelled).